

**CLAIMS**

What is claimed is:

1. A mold tool assembly comprising:  
  
a movable member defining a portion of a mold cavity surface; said movable member movable to receive additional material during filling of said mold cavity and displace said additional material to compensate for material shrinkage during solidification.
2. The assembly of claim 1, wherein said movable member is movable within a passage adjacent said cavity surface.
3. The assembly of claim 1, wherein said movable member comprises a face portion defining said portion of said cavity surface.
4. The assembly of claim 2, further comprising a carrier assembly for controlling movement of said movable member relative to said cavity surface.
5. The assembly of claim 4, wherein said carrier assembly provides a force on said movable member less than molding pressures to receive a desired amount of material.

6. The assembly of claim 5, wherein said carrier assembly provides a force on said movable member to displace a predetermined amount of material in response to local material volume changes within the mold cavity.
7. The assembly of claim 4, wherein said carrier assembly comprises a hydraulic actuator for controlling movement of said movable member.
8. The assembly of claim 4, wherein said carrier assembly comprises a pneumatic actuator for controlling movement of said movable member.
9. The assembly of claim 4, wherein said carrier assembly comprises a mechanical device for controlling movement of said movable member.
10. The assembly of claim 4, wherein said carrier assembly comprises an electric motor for controlling movement of said movable member.
11. The assembly of claim 4, wherein said carrier assembly comprises at least one biasing member for controlling movement of said movable member.
12. The assembly of claim 1, wherein said movable member is cylindrical.
13. The assembly of claim 1, wherein said movable member is rectangular.

14. The assembly of claim 1, wherein said movable member comprises a shape corresponding to local area corresponding to a portion of said cavity desired to compensate for material shrinkage during solidification.

15. The assembly of claim 1, wherein said movable member displaces received molten material to compensate for local volume changes in molten material.

16. The assembly of claim 1, wherein said movable member provides for the ejection of a molded article.

17. The assembly of claim 1, wherein said movable member forms a feature of a molded article.

18. The assembly of claim 1, comprising a plurality of movable member disposed within said mold tool.

19. A method of molding a molded article comprising:
  - a) introducing molten material into a mold cavity;
  - b) receiving molten material into a passage adjacent said mold cavity; and
  - c) displacing molten material from the adjacent passage toward said mold cavity to compensate for changes in volume caused by solidification of the molten material.
20. The method of claim 19, wherein said step c) comprises compensating for local volume changes by pushing molten material from said adjacent passage into said mold cavity.
21. The method of claim 19, wherein said step c.) comprises maintaining a desired material volume locally by pushing molten material into the mold cavity.
22. The method of claim 21, wherein the molten material is displaced from the passage proportionate to shrinkage of the molten material during solidification.
23. The method of claim 19, wherein a movable member is disposed within said passage and an actuator controls movement of the movable member in response to material entering the mold cavity.
24. The method of claim 19, comprising the step of applying a force with said movable member to limit the amount of molten material received within the adjacent passage.

25. The method of claim 24, comprising the step of applying a force with said movable member to push molten material from said adjacent passage proportionate to a reduction in local molten material volume within the mold cavity.